

**10 CSR 10-6.130 Controlling Emissions During Episodes of High
Air Pollution Potential**

(1) Applicability.

- (A) This rule shall apply to all emissions from any source or from any premises.
- (B) The boundaries of the affected area shall be determined at the discretion of the director in accordance with the nature and magnitude of the pollutant concentrations and meteorological conditions that cause the alert.

(2) Definitions.

- (A) Air pollution alert — The level of an air pollution episode known as an air pollution alert is that condition when the concentration of air contaminants reach the level at which the first stage control actions are to begin.
- (B) Air Stagnation Advisory — A special bulletin issued by the National Weather Service entitled "Air Stagnation Advisory," which is used to warn air pollution control agencies that stagnant atmospheric conditions are expected which could cause increased concentrations of air contaminants near the ground.
- (C) Area — For the purpose of this rule, any or all regions within the boundaries of the state of Missouri.
- (D) Definitions of certain terms specified in this rule, other than those specified in this rule section, may be found in 10 CSR 10-6.020.

(3) General Provisions.

(A) Air Pollution Alerts.

- 1. The Air Quality Index shall be reported to the general public on a daily basis by all metropolitan statistical areas with a population exceeding three hundred fifty thousand (350,000).
- 2. Alert levels are stated in terms of the Air Quality Index (AQI) as defined in 40 CFR part 58, Appendix G, for sulfur dioxide (SO₂), carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂) and Particulate Matter—10 Micron (PM₁₀) and 2.5 Micron (PM_{2.5}).

Table A shows the relation of the AQI breakpoint values to equivalent concentrations of air contaminants. All concentrations are averaged over the time period indicated.

Table A									
BREAKPOINT FOR THE AQI									
AQI	Alert Category	Alert Color	Breakpoint Values						
			O ₃ (ppm)	O ₃ (ppm)	PM _{2.5} (µg/m ³)	PM ₁₀ (µg/m ³)	CO (ppm)	SO ₂ (ppm)	NO ₂ (ppm)
			8-hour	1-hour ⁽¹⁾	24-hour	24-hour	8-hour	24-hour	24-hour
0–50	Good	Green	0.000–0.064	-----	0.0–15.4	0–54	0.0–4.4	0.000–0.034	(2)
51–100	Moderate	Yellow	0.065–0.084	-----	15.5–40.4	55–154	4.5–9.4	0.035–0.144	(2)
101–150	Unhealthy for sensitive groups	Orange	0.085–0.104	0.125–0.164	40.5–65.4	155–254	9.5–12.4	0.145–0.224	(2)
151–200	Unhealthy	Red	0.105–0.124	0.165–0.204	65.5–150.4	255–354	12.5–15.4	0.225–0.304	(2)
201–300	Very Unhealthy	Purple	0.125–0.374	0.205–0.404	150.5–250.4	355–424	15.5–30.4	0.305–0.604	0.65–1.24
301–400	Hazardous	Maroon	(3)	0.405–0.504	250.5–350.4	425–504	30.5–40.4	0.605–0.804	1.25–1.64
401–500	Hazardous	Maroon	(3)	0.505–0.604	350.5–500.4	505–604	40.5–50.4	0.805–1.004	1.65–2.04

⁽¹⁾ Areas are generally required to report the AQI based on eight (8)-hour ozone values. However, there are a small number of areas where an AQI based on one (1)-hour ozone values would be more precautionary. In these cases, in addition to calculating the eight (8)-hour ozone index value, the one (1)-hour ozone index value may be calculated, and the maximum of the two (2) values reported.

⁽²⁾ NO₂ has no short-term National Ambient Air Quality Standard and can generate an AQI value only above two hundred (200).

⁽³⁾ Eight (8)-hour O₃ values do not define higher AQI values (greater than or equal to three hundred one (301)). AQI values of three hundred one (301) or higher are calculated with one (1)-hour O₃ concentrations.

3. Alert types and levels of initiation.

- A. Orange alert AQI value. Any one (1) of the contaminants listed in paragraph (3)(A)2. reaching a concentration which results in an AQI value of one hundred one to one hundred fifty (101-150) shall initiate the orange alert.
 - B. Red alert AQI value. Any one (1) of the contaminants listed in paragraph (3)(A)2. reaching a concentration which results in an AQI value of one hundred fifty-one to two hundred (151-200) shall initiate the red alert.
 - C. Purple alert AQI value. Any one (1) of the contaminants listed in paragraph (3)(A)2. reaching a concentration which results in an AQI value of two hundred one to three hundred (201-300) shall initiate the purple alert.
 - D. Maroon emergency alert AQI value. Any one (1) of the contaminants listed in paragraph (3)(A)2. reaching a concentration which results in an AQI value of three hundred one to five hundred (301-500) shall initiate the maroon emergency alert.
- 4. Declaration of alerts. An orange alert, red alert, purple alert or maroon emergency alert may be declared on the basis of deteriorating air quality alone; an Air Stagnation Advisory need not be in effect. The appropriate episode status should be declared by the director as ambient monitoring would indicate.
 - 5. Termination of alerts. When, in the judgment of the director, meteorological conditions and pollutant concentrations warrant discontinuance of any alert condition, the director shall notify the technical staff, the chairman and members of the Missouri Air Conservation Commission that the alert has been discontinued and issue a public notice to that effect.

(B) Orange Alert.

1. Orange alert procedures shall be initiated by the director if the following conditions are met:
 - A. An Air Stagnation Advisory is in effect;
 - B. The orange alert AQI value is equaled or exceeded at any one (1) monitoring station within the affected area, unless there is a current forecast of meteorological improvement within the next twenty-four (24) hours; and
 - C. Meteorological conditions are such that the pollutant concentrations can be expected to remain or reoccur at the previously mentioned levels during the next twenty-four (24) or more hours or increase unless control actions are taken.
2. The following are orange alert procedures. The general public shall be informed through the news media that an orange alert exists, the geographical area(s) where the alert is applicable, the emission and type of source(s) that initiated the alert and encourage those with respiratory ailments or heart conditions to take the most appropriate and expedient precautions.

(C) Red Alert.

1. Red alert procedures shall be initiated by the director if the following conditions are met:
 - A. An Air Stagnation Advisory is in effect;
 - B. The red alert AQI value is equaled or exceeded at any one (1) monitoring station within the affected area, unless there is a current forecast of meteorological improvement within the next twenty-four (24) hours; and
 - C. Meteorological conditions are such that the pollutant concentrations can be expected to remain or reoccur at the previously mentioned levels during the next twenty-four (24) or more hours or increase unless control actions are taken.

2. The following are red alert procedures:
 - A. All affected governmental control agencies shall be notified that red alert conditions exist and that coordination of action is required;
 - B. All hospitals within the affected area shall be notified that red alert conditions exist;
 - C. The frequency of air monitoring shall be increased at all monitoring stations which are not continuous at intervals not exceeding one (1) hour, with continual hourly review at a central control location, if this equipment is available and it is deemed necessary by the director;
 - D. The general public shall be informed through the news media that a red alert exists, the geographical area(s) where the alert is applicable, the emission and type of source(s) that initiated the alert, individual abatement actions which will help alleviate the problem, and encourage those with respiratory ailments or heart conditions to take the most appropriate and expedient precautions;
 - E. The director shall request very emphatically through the news media that all unnecessary use of automobiles be restricted and that all entertainment functions and facilities be closed; and
 - F. No open burning will be allowed anywhere within the affected area.

(D) Purple Alert.

1. Purple alert procedures shall be initiated by the director if the following conditions are met:
 - A. An Air Stagnation Advisory is in effect; and

- B. The purple alert AQI value is equaled or exceeded at any one (1) monitoring station within the affected area.
2. The purple alert also can be initiated if –
- A. The purple alert AQI value is equaled or exceeded as the arithmetic mean for twelve (12) consecutive hours and an Air Stagnation Advisory is in effect; or
 - B. The red alert AQI value is equaled or exceeded as the arithmetic mean for twenty-four (24) consecutive hours and a forecast of stagnation for the following twelve (12) hours is received.
3. The following are purple alert procedures:
- A. All affected governmental control agencies shall be notified that purple alert conditions exist and that coordination of action is required;
 - B. All hospitals within the affected area shall be notified that purple alert conditions exist;
 - C. The frequency of air monitoring shall be increased at all monitoring stations which are not continuous at intervals not exceeding one (1) hour with continual hourly review at a central control location, if this equipment is available and it is deemed necessary by the director;
 - D. The general public shall be informed through the news media that a purple alert exists, the geographical area(s) where the alert is applicable, the emission and type of source(s) that initiate the alert, individual abatement actions which will help alleviate the problem and encourage those with respiratory ailments or heart conditions to take the most appropriate and expedient precautions;

- E. Airlines operating within the purple alert area shall be notified that those conditions exist and that a reduction of flights out of the airport may be required;
 - F. Nonlocal vehicular traffic may be diverted around the purple alert area depending upon which pollutant(s) caused the alert;
 - G. Local vehicular traffic, through the news media, shall be told to avoid certain areas and emphatically told to restrict nonessential trips;
 - H. All incineration and open burning shall cease throughout the area; and
 - I. Facilities which are sources of air contaminant emissions and are required to file approved alert plans with the director for purple alert conditions shall initiate these plans upon notification by the director (see paragraph (3)(D)4.).
4. Purple alert plan objectives. AQI breakpoints from two hundred one to three hundred (201-300).
- A. Air contaminant source. Electric power generating facilities – requirements for plan.
 - (I) Reduction of emission by utilization of fuels having low ash and sulfur content. Soot blowing and boiler lancing to be allowed only during periods of high atmospheric turbulence (12:00 noon to 4:00 p.m.).
 - (II) Reduction of emissions by diverting electric power generation to facilities outside of area for which the alert is called.
 - B. Air contaminant source. Process steam generating facilities – requirements for plan.
 - (I) Reduction of emissions by utilization of fuels having low ash and sulfur

content. Soot blowing and boiler lancing to be allowed only during periods of high atmospheric turbulence (12:00 noon to 4:00 p.m.).

- (II) Reduction of steam load demands consistent with continuing the operation of the plant.

C. Air contaminant source. Manufacturing industries of the following *Standard Industrial Classification Manual* (SIC) group designations: grain industries, group 20; paper and allied products industries, group 26; chemicals and allied products industries, group 28; petroleum refining and related industries, group 29; stone, glass, clay and concrete product industries, group 32; primary metal industries, group 33—requirements for plan.

- (I) Curtailing, postponing or deferring production and allied operations. Stopping all trade waste disposal practices which emit particles, gases, vapors or malodorous substances including incineration.

- (II) Reducing heat load demands for processing to a minimum.

D. Air contaminant source. Other manufacturing facilities required to submit alert plans by the director — requirements for plan.

- (I) Reduction of air contaminant emissions by curtailing or deferring production and allied operations. Stoppage of all trade waste disposal practices which emit particles, gases, vapors or malodorous substances including incineration.

- (II) Reduction of heat load demands for processing to a minimum.

- E. Air contaminant source. Private, public and commercial refuse disposal operations – requirement for plan.
 - (I) Stoppage of all open burning including disposal of trees and burning at fire-fighting schools, except as required for disposal of hazardous materials or other emergency needs.
 - (II) Operation of incinerators shall be limited to the hours between 10:00 a.m. and 2:00 p.m.
- F. Air contaminant source. Transportation – requirement for plan. The unnecessary operation of any motor vehicle should be restricted.

(E) Maroon Emergency Alert.

- 1. Maroon emergency alert procedures shall be initiated by the director, if the following conditions are met:
 - A. An Air Stagnation Advisory is in effect; and
 - B. The maroon emergency alert AQI value is equaled or exceeded at any one (1) monitoring station within the advisory area.
- 2. The maroon emergency procedures can also be initiated if –
 - A. The maroon emergency alert AQI value is equaled or exceeded as the arithmetic mean of twelve (12) consecutive hours and a forecast of stagnation for the following twelve (12) hours is received;
 - B. The purple alert AQI value is equaled or exceeded as the arithmetic mean for twenty-four (24) hours and a forecast of stagnation for the following twelve (12) hours is received; or

- C. The red alert AQI value is equaled or exceeded as the arithmetic mean for thirty-six (36) hours and a forecast of stagnation for the following twelve (12) hours is received.
3. The following are maroon emergency alert procedures:
- A. All affected governmental control agencies shall be notified that a maroon emergency alert exists and that coordination of action is required;
 - B. All hospitals within the affected area shall be notified that a maroon emergency alert exists and to be so prepared;
 - C. The frequency of air monitoring shall be increased at all monitoring stations which are not continuous at intervals not exceeding one-half (1/2) hour with continual half-hour review at a central control location, if this equipment is available and it is deemed necessary by the director;
 - D. Open burning and incineration shall cease throughout the area;
 - E. Facilities which are sources of air contaminant emissions and are required to have filed approved plans with the director shall initiate these plans upon notification by the director or his/her representative that air pollution emergency conditions exist (see paragraph (3)(E)4.);
 - F. The use of motor vehicles is prohibited except in emergencies with the approval of local or state police;
 - G. All manufacturing facilities except those listed in subparagraph (3)(E)3.E. shall institute action that will result in maximum reduction of air contaminants from their operations by ceasing, curtailing or postponing operations to the extent possible

without causing injury to persons or damage to equipment;

- H. All airplane flights originating within the area of the maroon emergency alert shall be cancelled;
- I. All places of employment described as follows immediately shall cease operation during the maroon emergency alert:
 - (I) Mining and quarrying;
 - (II) Contract construction work;
 - (III) Wholesale trade establishments;
 - (IV) Schools and libraries;
 - (V) Governmental agencies except those needed to administer air pollution alert program and other essential agencies determined by the director to be vital for public safety and welfare and needed to administer the provisions of this rule;
 - (VI) Retail trade stores except those dealing primarily in sale of food or pharmacies;
 - (VII) Banks, real estate agencies, insurance offices and similar business;
 - (VIII) Laundries, cleaners and dryers, beauty and barber shops and photographic studios;
 - (IX) Amusement, recreational, gaming and entertainment service establishments;
 - (X) Automobile repair and automobile service garages; and
 - (XI) Advertising offices, consumer credit reporting, adjustment and collection

agencies, printing and duplicating services, rental agencies and commercial testing laboratories; and

- J. The general public shall be informed through the news media that a maroon emergency alert exists, the geographical area(s) where the alert is applicable, the emission and type of source(s) that initiated the alert, individual abatement actions which will help alleviate the problem and encourage those with respiratory ailments or heart conditions to take the most appropriate and expedient precautions.
4. Maroon emergency alert plan objectives. AQI breakpoints from three hundred one to four hundred (301-400). All purple alert plans shall be continued. In addition, the following measures shall be taken:
- A. Air contaminant source. Process steam generating facilities – requirements for plan.
 - (I) Maximum reduction of air contaminant emissions by utilization of fuels having the lowest ash and sulfur content.
 - (II) Maximum utilization of periods of high atmospheric turbulence (12:00 noon to 4:00 p.m.) for soot blowing and boiler lancing. Prepare to implement the emergency plan submitted to the director.
 - B. Air contaminant source. Manufacturing industries of the following SIC group designations: grain industries, group 20; paper and allied products industries, group 26; chemical and allied products industries, group 28; petroleum refining and related industries, group 29; stone, glass, clay and concrete product industries, group 32; primary metals industries, group 33—requirements for plan.

- (I) Maximum reduction of air contaminant emissions by, if necessary, postponing production and allied operations.
 - (II) Maximum reduction of heat load demands for processing. Prepare to implement the emergency plan submitted to the director;
 - C. Air contaminant source. Other manufacturing facilities required to submit alert plans by the director—requirement for plan. Maximum reduction of air contaminant emissions, if necessary, by postponing production and allied operations;
 - D. Air contaminant source. Private, public and commercial refuse disposal operations — requirement for plan. Stop operation of all incinerators; and
 - E. Air contaminant source. Transportation — requirement for plan. Car pools and public transportation must be used in place of unnecessary motor vehicle operation.
5. Maroon emergency alert plan objectives. AQI breakpoints from four hundred one to five hundred (401-500). All purple alert plans and maroon emergency alert plan from AQI breakpoints three hundred one to four hundred (301-400) shall be continued. In addition, the following measures shall be taken:
- A. Air contaminant source. Process steam generating facilities — requirements for plan.
 - (I) Maximum reduction of air contaminant emissions by reducing heat and steam load demands to values consistent with preventing equipment damage.
 - (II) Maximum utilization of periods of high atmospheric turbulence (12:00 noon to 4:00 p.m.) for soot blowing and boiler lancing;

- B. Air contaminant source. Manufacturing industries of the following SIC group designations: grain industries, group 20; paper and allied products industries, group 26; chemicals and allied products industries, group 28; petroleum refining and related industries, group 29; stone, glass, clay and concrete product industries, group 32; primary metals industries, group 33 – requirement for plan. Elimination of air contaminant from the manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment;
- C. Air contaminant source. Other manufacturing facilities required to submit alert plans by the director – requirements for plan.
 - (I) Elimination of air contaminant emissions from the manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment.
 - (II) Maximum reduction of heat load demands for processing;
- D. Air contaminant source. Private, public and commercial operations – requirement for plan. The following places of employment, if notified by the director, immediately shall cease operations: mining and quarrying operations; construction projects except as required to avoid emergent physical harm; manufacturing establishments except those required to have in force an air pollution alert plan; wholesale trade establishments; governmental units, except as required to implement the provisions of this rule and other operations essential to immediate protection of the public welfare and safety; retail trade and service establishments except

pharmacies, food stores and other similar operations providing for emergency needs; other commercial service operations, such as those engaged in banking, insurance, real estate, advertising, and the like; educational institutions; and amusement, recreational, gaming and entertainment facilities;

E. Air contaminant source. Transportation – requirement for plan. Motor vehicles shall only be used for private and public emergency needs.

- (4) Reporting and Record Keeping. Facilities which are sources of air contaminant emissions and required to file approved alert plans per paragraphs (3)(D)4., (3)(E)4. and (3)(E)5. shall file approved purple and maroon alert plans within sixty (60) days with the director after request by the director to submit alert plans.
- (5) Test Methods. The testing references for Missouri ambient air quality data are as specified in 10 CSR 10-6.040 Reference Methods.

EPA Rulemakings

PRM: 68 FR 12887 (03/18/2003)

APDB File: MO-198

[illegible]

PRM: None

State Final: 13 MR 602 (4/18/88)

Description: The EPA approved revisions to the regulation which deleted TSP and added PM₁₀.

[illegible]

PRM: None

State Final: 9 MR 1550 (10/1/84)

Description: The EPA approved a new regulation for controlling emissions during emergency episodes. The rule replaced rules 10 C.S.R. 10-2.170, 3.110, 4.160, and 5.260.

[illegible]

Difference Between the State and EPA-Approved Regulation

None.